

Illinois Height Modernization Program: Data Stewardship for High Resolution Elevation Data

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The purpose of the Illinois Height Modernization Program (ILHMP) is to improve access to elevation information for Illinois by providing a repository for high-resolution elevation Light Detection and Ranging (LiDAR) data and installing an extensive network of surveying benchmarks. To date, ILHMP has provided access to LiDAR and related derivative elevation data for 22 Illinois counties and added 301 current monument records to the National Spatial Reference System database. New funding will enable a significant program expansion in 2012. We anticipate delivery of LiDAR data for 50 additional counties, including 3 counties acquired with program funding (fig. 1).

The geodetic leveling effort aims to replace lost benchmarks, establish the first north-south geodetic level line in Illinois (fig. 2), and resolve issues related to conversion between numerous vertical datums. Ultimately, the resulting statewide network will consist of points that are Global Positioning System (GPS) accessible, accurate both horizontally and vertically, and tied to a single vertical datum. Height modernization will standardize control used in the measurement and modeling of watersheds, rivers, roadways, floodplains, farm fields, landforms, landslides, and well locations throughout the State. These improvements will result in significant cost savings for public services and infrastructure.

Program information and current status maps are available through the Illinois Natural Resources Geospatial Data Clearinghouse (see <http://crystal.isgs.uiuc.edu/nsdihome/webdocs/ilhmp/>).

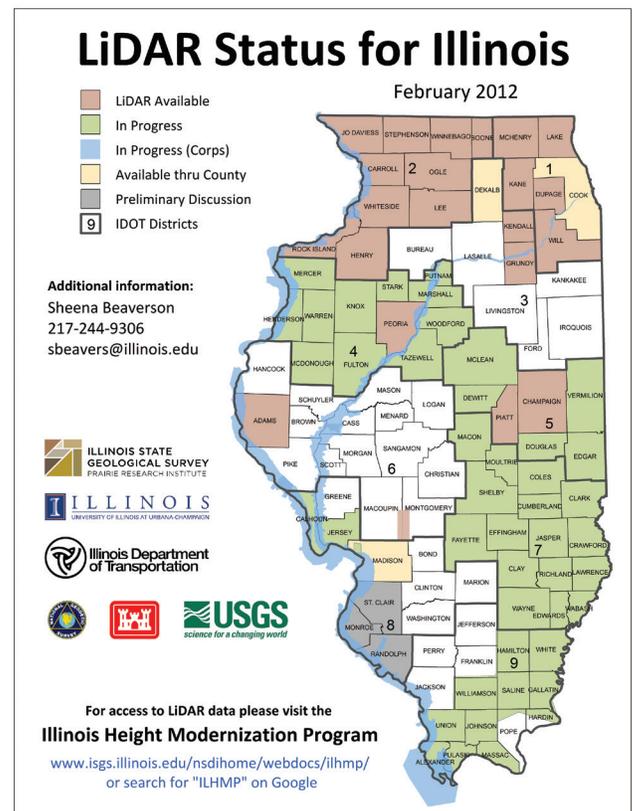


Figure 1. LiDAR status for Illinois as of February 2012.

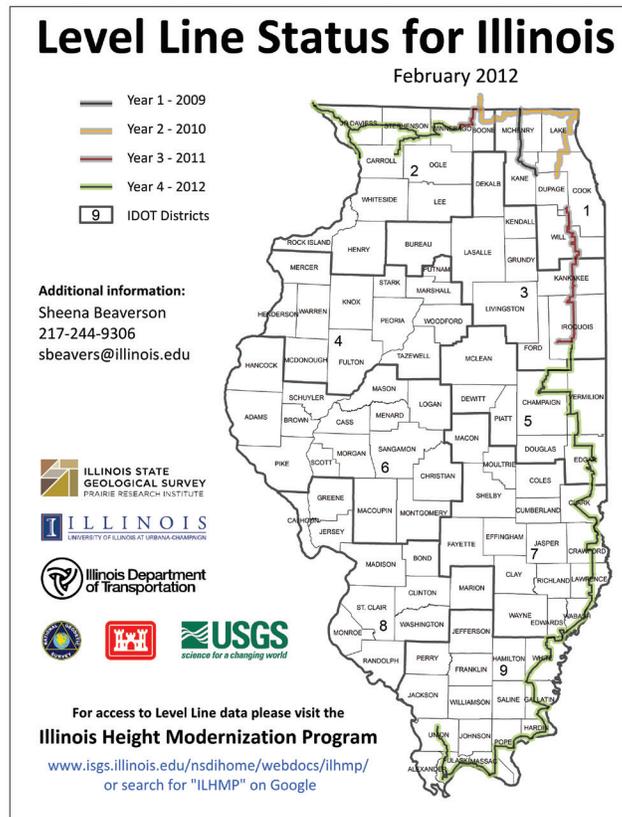


Figure 2. Geodetic level line status for Illinois as of February 2012.